### Human Coch-5B2 cDNA Sequence

1 GCACTCGGGC GCAGCCGGGT GGATCTCGAG CAGGTGTGAG CAGCCTATCA GTCACCATGT CCGCAGCCTG GATCCCGGCT CTCGGCCTCG GTGTGTGTCT GCTGCTGCTG CCGGGGCCCG CGGGCAGCGA GGGAGCCGCT CCCATTGCTA TCACATGTTT TACCAGAGGC TTGGACATCA GGAAAGAGAA AGCAGATGTC CTCTGCCCAG GGGGCTGCCC TCTTGAGGAA TTCTCTGTGT ATGGGAACAT AGTATATGCT TCTGTATCGA GCATATGTGG GGCTGCTGTC CACAGGGGAG TAATCAGCAA CTCAGGGGGA CCTGTACGAG TCTATAGCCT ACCTGGTCGA GAAAACTATT CCTCAGTAGA TGCCAATGGC ATCCAGTCTC AAATGCTTTC TAGATGGTCT GCTTCTTTCA CAGTAACTAA AGGCAAAAGT AGTACACAGG AGGCCACAGG ACAAGCAGTG TCCACAGCAC ATCCACCAAC AGGTAAACGA CTAAAGAAAA CACCCGAGAA GAAAACTGGC AATAAAGATT GTAAAGCAGA CATTGCATTT CTGATTGATG GAAGCTTTAA TATTGGGCAG CGCCGATTTA ATTTACAGAA GAATTTTGTT GGAAAAGTGG CTCTAATGTT GGGAATTGGA ACAGAAGGAC CACATGTGGG CCTTGTTCAA GCCAGTGAAC ATCCCAAAAT AGAATTTTAC TTGAAAAACT TTACATCAGC CAAAGATGTT TTGTTTGCCA TAAAGGAAGT AGGTTTCAGA GGGGGTAATT CCAATACAGG AAAAGCCTTG AAGCATACTG CTCAGAAATT CTTCACGGTA GATGCTGGAG TAAGAAAGG GATCCCCAAA GTGGTGGTGG TATTTATTGA TGGTTGGCCT TCTGATGACA TCGAGGAAGC AGGCATTGTG GCCAGAGAGT TTGGTGTCAA TGTATTTATA GTTTCTGTGG CCAAGCCTAT CCCTGAAGAA CTGGGGATGG TTCAGGATGT CACATTTGTT GACAAGGCTG TCTGTCGGAA TAATGGCTTC TTCTCTTACC ACATGCCCAA CTGGTTTGGC ACCACAAAAT ACGTAAAGCC TCTGGTACAG AAGCTGTGCA CTCATGAACA AATGATGTGC AGCAAGACCT GTTATAACTC AGTGAACATT GCCTTTCTAA TTGATGGCTC CAGCAGTGTT GGAGATAGCA ATTTCCGCCT CATGCTTGAA TTTGTTTCCA ACATAGCCAA GACTTTTGAA ATCTCGGACA TTGGTGCCAA GATAGCTGCT GTACAGTTTA CTTATGATCA GCGCACGGAG TTCAGTTTCA CTGACTATAG CACCAAAGAG AATGTCCTAG CTGTCATCAG AAACATCCGC TATATGAGTG GTGGAACAGC TACTGGTGAT GCCATTTCCT TCACTGTTAG AAATGTGTTT GGCCCTATAA GGGAGAGCCÇ CAACAAGAAC TTCCTAGTAA TTGTCACAGA TGGGCAGTCC TATGATGATG TCCAAGGCCC TGCAGCTGCT GCACATGATG CAGGAATCAC TATCTTCTCT GTTGGTGTGG CTTGGGCACC TCTGGATGAC CTGAAAGATA TGGCTTCTAA ACCGAAGGAG TCTCATGCTT TCTTCACAAG AGAGTTCACA GGATTAGAAC CAATTGTTTC TGATGTCATC AGAGGCATTT GTAGAGATTT CTTAGAATCC CAGCAATAAT GGTAACATTT TGACAACTGA AAGAAAAAGT ACAAGGGGAT CCAGTGTGTA AATTGTATTC TCATAATACT GAAATGCTTT AGCATACTAG AATCAGATAC AAAACTATTA AGTATGTCAA CAGCCATTTA GGCAAATAAG CACTCCTTTA AAGCCGCTGC CTTCTGGTTA CAATTTACAG TGTACTTTGT TAAAAACACT GCTGAGGCTT CATAATCATG GCTCTTAGAA ACTCAGGAAA GAGGAGATAA TGTGGATTAA AACCTTAAGA GTTCTAACCA TGCCTACTAA ATGTACAGAT ATGCAAATTC CATAGCTCAA TAAAAGAATC

# FIGURE 1 (CONTINUED)

TGATACTTAG ACCAAAAGCA ACATTCGTTC TCTAACCATT CTGTATTGAT TATATAAGCA AAATGAAAAG AGAAACTTAA ATGAACACAG CTCTTTAACA TGGTTCAGGT ACACATATTT TGACCCAAGT GGATATTTTC TTAAAACCAA TCAATAATAG CTAGCTATTA CTGCAGACTA TAAAATCTGG ATATAGAAAG GAGACCTGTA TCAAACTGCT TTTGTAGTGT GTTTTCATAA CAACTTATGA CTAAAAATAT CACACTGAAT AAGAGAGCAG GATTGCCAGG TATTTTCTA TTTCTCTCCT TAATTTTATA TGTATATAGA TATATTTGGC TTATATTCTA AGTCACCTAA GTACTTAAAA GTTAAGTTGG TAAAGTATTT ACTGACTGCT TATAAACATT TAAAGACAAA GACATTTCAA ATAACTGCAG AAAAAAATATT GTAGTTGAA TATTTGAA TATTTAAGCA ATAAAACTGC TAGTGAGTTA TTGT

# Human Coch-5B2 Amino Acid Sequence

1 MSAAWIPALG LGVCLLLLPG PAGSEGAAPI AITCFTRGLD IRKEKADVLC
PGGCPLEEFS VYGNIVYASV SSICGAAVHR GVISNSGGPV RVYSLPGREN
YSSVDANGIQ SQMLSRWSAS FTVTKGKSST QEATGQAVST AHPPTGKRLK
KTPEKKTGNK DCKADIAFLI DGSFNIGQRR FNLQKNFVGK VALMLGIGTE
GPHVGLVQAS EHPKIEFYLK NFTSAKDVLF AIKEVGFRGG NSNTGKALKH
TAQKFFTVDA GVRKGIPKVV VVFIDGWPSD DIEEAGIVAR EFGVNVFIVS
VAKPIPEELG MVQDVTFVDK AVCRNNGFFS YHMPNWFGTT KYVKPLVQKL
CTHEQMMCSK TCYNSVNIAF LIDGSSSVGD SNFRLMLEFV SNIAKTFEIS
DIGAKIAAVQ FTYDQRTEFS FTDYSTKENV LAVIRNIRYM SGGTATGDAI
SFTVRNVFGP IRESPNKNFL VIVTDGQSYD DVQGPAAAAH DAGITIFSVG
VAWAPLDDLK DMASKPKESH AFFTREFTGL EPIVSDVIRG ICRDFLESQQ

## Mouse Coch-5B2 cDNA Sequence

1 CGGAGCCGCG CTTGCCGCAC TCGGGTGTAG CCGGGCGGAT CCCACGCAGG TCCACGGAGA TCCTCGCCAT GCCCTCGTCC AGGATCCCTG CTCTCTGCCT CGGTGCGTGG CTGCTGCTGC TGCTGCTGCC CCGGTTCGCG CGCGCCGAGG GAGCGGTTCC CATTCCTGTC ACCTGCTTTA CCAGAGGCCT GGATATCCGA AAAGAGAAAG CAGATGTTCT CTGCCCAGGA GGCTGCTCTC TTGAGGAATT CTCTGTGTTT GGGAACATAG TGTATGCGTC AGTGTCCAGC ATCTGCGGCG CTGCTGTCCA TAGGGGAGTG ATTGGCACCT CAGGGGGACC TGTGCGTGTC TACAGCCTTC CTGGTCGAGA GAACTACTCC TCGGTAGATG CCAACGGCAT CCAGTCTCAG ATGCTTTCCC GATGGTCCGC GTCCTTCGCT GTGACCAAAG GCAAAAGCAG TACCCAGGAA GCCACAGGAC GGGCAGTGTC CACAGCCCAC CCACCTTCAG GTAAAAGACT AAAGAAGACA CCAGAGAAGA AGACTGGCAA CAAAGACTGT AAGGCAGACA TTGCATTTCT CATTGATGGA AGCTTCAATA TTGGGCAGCG CCGATTTAAT TTGCAGAAGA ATTTTGTTGG GAAAGTGGCA CTAATGTTGG GAATTGGAAC AGAAGGACCA CACGTGGGTC TCGTTCAAGC CAGTGAACAC CCCAAAATAG AATTTTACTT GAAAAACTTT ACTTCAGCCA AAGATGTCTT GTTTGCCATA AAAGAAGTAG GTTTCCGAGG GGGTAACTCC AACACAGGAA AAGCCTTGAA GCACACTGCT CAGAAATTCT TTACAGCAGA CACTGGTGTG AGAAAAGGAA TACCAAAAGT GGTGGTAGTG TTTATTGATG GTTGGCCCTC TGATGACATT GAGGAAGCAG GCATTGTGGC CAGAGAGTTT GGTGTCAATG TATTTATAGT TTCTGTGGCC AAGCCCATTC CTGAAGAACT GGGGATGGTT CAAGATGTTG CATTTGTTGA CAAGGCTGTG TGTCGGAATA ATGGCTTCTT CTCTTATCAC ATGCCCAACT GGTTTGGCAC TACAAAATAT GTGAAGCCTC TGGTGCAGAA GCTCTGTACG CACGAACAGA TGATGTGCAG CAAAACCTGC TACAACTCAG TGAACATTGC CTTTCTGATT GACGGCTCCA GCAGTGTTGG AGATAGCAAT TTCCGCCTCA TGCTAGAATT TGTTTCTAAC ATAGCGAAGA CATTTGAAAT CTCAGACATT GGAGCCAAGA TAGCTGCTGT ACAGTTCACT TATGACCAGC GCACCGAGTT CAGTTTCACT GACTATAATA CCAAAGAGAA CGTCCTAGCT GTCCTAGCGA ACATCCGCTA CATGAGTGGT GGCACAGCTA CTGGTGATGC CATCGCCTTT ACTGTTAGAA ATGTATTTGG TCCCATAAGG GACAGCCCCA ACAAAAACTT CCTGGTTATT GTCACAGATG GGCAGTCCTA TGATGATGTC CGAGGCCCTG CTGCAGCTGC CCATGATGCA GGTATCACCA TCTTCTCTGT TGGTGTGGCT TGGGCACCGC TGGATGACCT GAGAGATATG GCCTCTAAAC CCAAAGAGTC ACACGCTTTC TTTACCAGAG AGTTCACAGG GTTAGAACCA ATTGTCTCTG ACGTCATCAG AGGCATTTGT AGAGACTTCT TAGAATCCCA GCAATAACCG ATACTCTGAC AACTCAAGGA ATACGTGCAA GGGGATCTAA TGTGCAAATT ATATTCTCAA TGCCTATGTA ACTTTATAGC TTACCAGTGT CAAAAAATGC GTCCACAGCT GTTTAAAGCA AATGAATATT CATGTGATGC TCACAATTTA GATTGGCCGA GACTTGATAA TCAGGCCCTT AGAAACTCAG GAAAGAAGAG TTGTCATGGA TTAACATTGG GAGTTCAAAT ATGCATTCAA GTGGATAGGT AAGCTACACA GCTCAATAAA AGAACCTGGC GCTTACACAC AAAGCACTGT TCCCTCTTTA ATCACTCTGC ATTGACCATG CAAGGAAAAC AGAACAGCTT TTAAACACAG

## FIGURE 2 (CONTINUED)

ATCAAGTATA CATATTTTGA CCCATGTGGA TGTTTTCTTA AAACCAGCCA AGAACAGACA GCTGTTATTA TGTGCACTAG CCATAACTAC ACATTATATG GAATCATATA TCAAGCTTCT TTTGTAGTGT GTTTTCATAA CTTGATGGCT GAAATACCAC ACTGAGTAAA GGTAGGATTG CCTGGTATTT TTCTATTTAT ATCCTTAATT TTATGTGTAT AGACAGGCAT GTACTCCGAG GACTAAGAAA ATGTTTAAGC AGATAACTTT TTTTTTTTGA AAAAAAAGAT GTGTCAAGTA TTGTAACCGA AAAAATACAC AGCTTAATAG CTTGGCTGTC AGCAATAAAA CTGCTAGTGA CTAAG

# Mouse Coch-5B2 Amino Acid Sequence

I MPSSRIPALC LGAWLLLLL PRFARAEGAV PIPVTCFTRG LDIRKEKADV
LCPGGCSLEE FSVFGNIVYA SVSSICGAAV HRGVIGTSGG PVRVYSLPGR
ENYSSVDANG IQSQMLSRWS ASFAVTKGKS STQEATGRAV STAHPPSGKR
LKKTPEKKTG NKDCKADIAF LIDGSFNIGQ RRFNLQKNFV GKVALMLGIG
TEGPHVGLVQ ASEHPKIEFY LKNFTSAKDV LFAIKEVGFR GGNSNTGKAL
KHTAQKFFTA DTGVRKGIPK VVVVFIDGWP SDDIEEAGIV AREFGVNVFI
VSVAKPIPEE LGMVQDVAFV DKAVCRNNGF FSYHMPNWFG TTKYVKPLVQ
KLCTHEQMMC SKTCYNSVNI AFLIDGSSSV GDSNFRLMLE FVSNIAKTFE
ISDIGAKIAA VQFTYDQRTE FSFTDYNTKE NVLAVLANIR YMSGGTATGD
AIAFTVRNVF GPIRDSPNKN FLVIVTDGQS YDDVRGPAAA AHDAGITIFS
VGVAWAPLDD LRDMASKPKE SHAFFTREFT GLEPIVSDVI RGICRDFLES
QQ\*

	MSAAWIPALGLG VCLLLLPGPAGSEGAAPIAITCFTRGLDIRKEKADV	
1	.PSSRCAWLLRF.RAVPV	50
	LCPGGCPLEEFSVYGNIVYASVSSICGAAVHRGVISNSGGPVRVYSLPGR	
51	SF	100
	ENYSSVDANGIQSQMLSRWSASFTVTKGKSSTQEATGQAVSTAHPPTGKR	
101	·····	150
149	LKKTPEKKTGNKDCKADIAFLIDGSFNIGQRRFNLQKNFVGKVALMLGIG	198
151		200
199	TEGPHVGLVQASEHPKIEFYLKNFTSAKDVLFAIKEVGFRGGNSNTGKAL	248
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249	KHTAQKFFTVDAGVRKGIPKVVVVFIDGWPSDDIEEAGIVAREFGVNVFI	298
251	A.T	300
299	VSVAKPIPEELGMVQDVTFVDKAVCRNNGFFSYHMPNWFGTTKYVKPLVQ	348
301	A	350
349	KLCTHEQMMCSKTCYNSVNIAFLIDGSSSVGDSNFRLMLEFVSNIAKTFE	398
351		400
399	ISDIGAKIAAVQFTYDQRTEFSFTDYSTKENVLAVIRNIRYMSGGTATGD	448
401	LALA	450
449	AISFTVRNVFGPIRESPNKNFLVIVTDGQSYDDVQGPAAAAHDAGITIFS	498
451	A	500
	VGVAWAPLDDLKDMASKPKESHAFFTREFTGLEPIVSDVIRGICRDFLES	
501	R	550
549	QQ* 550	
551	552	

V V FILD G W P S D D I E E A G I V A R E F G V N V F I V S V A K P I P E E L

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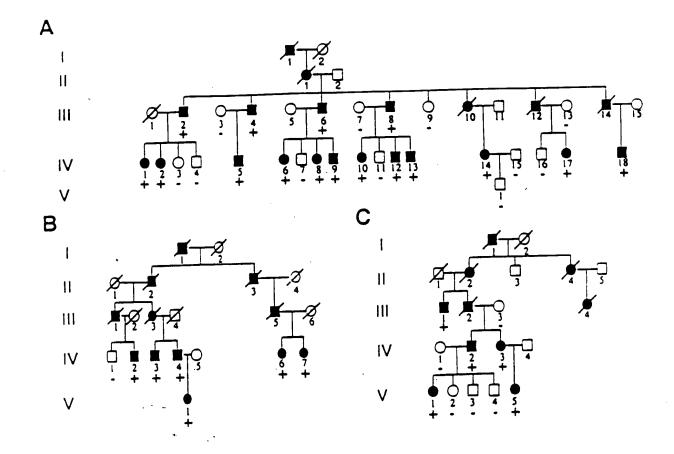
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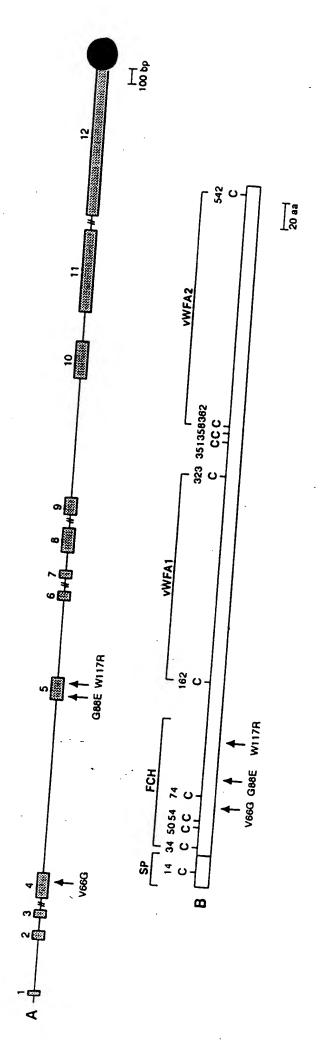
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V I L V T D V S V D A A A D A A R S N R V T V F P I G I

COCH-582 VA1 COCH-582 VA2 COL12A1 VA CMP A1







# FIGURE 7 (CONTINUED)

0 0 4 0 0 4 0	1 5 6 0 1 1 5 5 6 4 3 5 5 6 4 3 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	2 4 9 2 5 1 2 4 6	340	4 3 1 4 3 3 4 2 8	529 524 519	
Coch-5B2 (Human) 1 HSAANIPALGLGVCLLLLPGPAGSEGAAPIAITCIFTRGLDIRKEKADVLICPGGGCPLEEFSVYGNIVYA Coch-5B2 (Human) 1 PSSRC.AMLLRF.RAV.PV	69 SVSSICGAAVHRGVISNSGGPVRVYSLPGRENYSSVDANGIQSQHLSRWSASFTVTKGKSST-QEATGQAVSTAHPPTGKRLKKTPEKKTG 71	159 NKDICKADIAFLIDGSFNIGGRRFNLQRNFVGKVALMLGIGTEGPHVGLVQASEHPRIEFYLKNFTSAKDVLFAIKEVGFRGGNSNTGRALK 161 - 11 - 11 - 11 - 11 - 11 - 11 - 11	250 HTAQKEFTVDAGVRKGIPKVVVVFIDGNPSDDIEEAGIVAREFGVNVFIVSVAKPIPEELGHVQDVTFVDKAV <mark>C</mark> RNNGFFSYHMPNWFGTT 252A.TA.T	341 KYVKPLVQKDCTHEQHMCISKTCYNSVNIAFLIDGSSSVGDSNFRLHLEFVSNIAKTFEISDIGAKIAAVQFTYDQRTEFSFTDYSTKENVL 343	432 AVIRNIRYMSGGTATGDAISFTVRNVFGPIRESPNRNFLVIVTDGQSYDDVQGPAAAAHDAGITIFSVGVAWAPLDDLKDHASRPKESHAF 434	523 FTREFTGLEPIVSDVINGI <mark>C</mark> RDFLESQQ* 550 525